

# Hitchcock's Machine Tool Blue Book

NOVEMBER, 1932

TWENTY-SEVENTH YEAR

## Abart Gears and Reducers



Speed  
Reducers  
of all  
types

—  
MotORIZED  
or  
Standard



**We manufacture gears of all types and materials.**  
**Rush Orders Solicited—Quality and Service Guaranteed**  
**NO ORDERS TOO LARGE OR TOO SMALL**

## Abart

**Gear & Machine  
— Company —**

4835 W. 16th St., Cicero, Ill.

**—LAST WORD IN GEARS—**

**PUBLISHED AT 508 So. DEARBORN ST. CHICAGO**

# More Than Your Money's Worth!

*A "Delta" Drill Press . . .  
Built Like \$75 . . . Oper-  
ates Like \$75 . . . and Of-  
fered at the Remarkably  
Low Price of*

## \$29.90

Complete with belt and motor pulley  
( $\frac{1}{2}$ " bore). Motor Extra.

**M**ODEL 970 has very heavy cast-iron head, with motor mounted at rear, avoiding jack shaft. Four speeds, 590, 1275, 2,450 and 5,000 R. P. M. Sturdy V-belt drive (belt full  $\frac{1}{2}$ " wide); no slipping, no loss of power. Built to run at speeds up to 12,000 R. P. M.

Spindle runs in New Departure high-speed ball bearings. Heavy, solid steel quill, accurately graduated and provided with "quick-set" adjustable pointer for convenience in depth gauging. Adjustable stop rod and nuts for automatic depth gauging anywhere within the travel of the spindle. Spindle travel, 4".

Machine drills to center of 14" circle, and takes drills up to  $\frac{17}{32}$ " diameter. Table can be dropped a distance of 43" from spindle, giving machine enormous capacity. The diameter of the column is a full  $2\frac{3}{4}$ " and the overall height of the machine is 68". Table is 10" by 10" in size. Floor space is 18" by 24" and shipping weight 125 lbs. Interchangeable spindles available; one with Jacobs' chuck.

Head can be swung to one side to serve as a radial drill for odd-shaped work, and it can be lowered to within a few inches of the floor for low, heavy work. For further details send for Special Drill Press Circular DP900.

## Delta Mfg. Company

3779 North Holton Street  
MILWAUKEE, WISCONSIN



# Hitchcock's Machine Tool Blue Book

Selected  
Circulation

Over 25,000  
Monthly

NOVEMBER, 1932

TWENTY-SEVENTH YEAR

## Action and Economy

ADVERTISERS want action, without having to pay too much per act.

But don't get the idea that advertising will do everything. It won't sell snowballs at the North Pole, or heating plants on the Equator, or machines that were out of date when Washington crossed the Delaware.

But if you make a machine or tool for which there is a real need in metal-working plants, prepare copy which states clearly why people should buy it, place your advertisement in the BLUE BOOK, and you will get more action for the cost than from any other medium on earth.

A good machine, clear copy, and the BLUE BOOK—that assuredly is an unbeatable combination for a maximum of action with real economy.

*Before you forget, get in touch with  
the publishers today, and try it out.*

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*Published By*

**Hitchcock Publishing Co.**  
508 S. Dearborn St., Chicago, Ill.

*Consult the Classified Finding Index for your requirements*

**FOOTBURT**



## **A Single Spindle Footburt Sipp Sensitive Drill**

**Made in three  
sizes of single  
and multiple  
spindle models**

### **More holes with this machine**

**Why? Because you can change speeds in two seconds or belts in ten seconds—because the automatic idlers keep the belt pulling to capacity at all times—because the full ball bearing equipment and accurate machining gives a smooth, fast cut.**

*Write for No. 650 Folders*

**The Foote-Burt Company, Cleveland, O.**

**FOOTBURT**

# NOC-OUT

## Automatic Roll Feeds For Punch Presses Speed Production

Secure automatic feeding with its many advantages for your punch presses by installing the NOC-OUT Automatic Reversible Feed. This small unit automatically feeds metal, paper, brake lining or any other stock from coils in lengths from 0 to 30 inches per stroke of press.

### FASTER — ACCURATE — ECONOMICAL

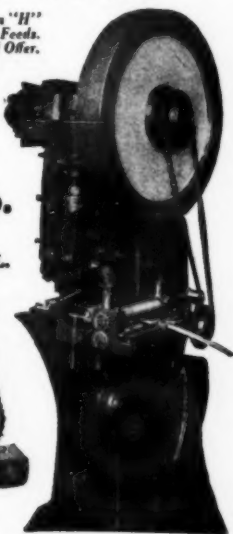
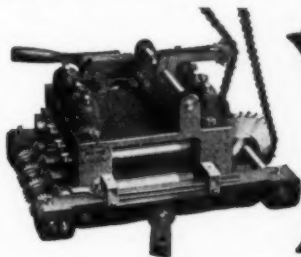
Labor is saved, production is increased and your men safeguarded with this feed. Automatic feeding means full speed production all day long —there are no "let downs" as it eliminates the human element whose energies are limited. Can be readily installed on any press.

*We will gladly send you a copy of Bulletin "H" describing NOC-OUT Automatic Roll Feeds. Write for it and details of Our Free Trial Offer.*

We design and build progressive and automatic dies for high speed production. Submit samples of your stamping for estimate.

**Wittek Mfg. Co.**

4309 W. 24th Place,  
Dept. "H" CHICAGO, ILL.



# THE VALUE OF A TOOL DEPENDS ON WHAT IT WILL PRODUCE.

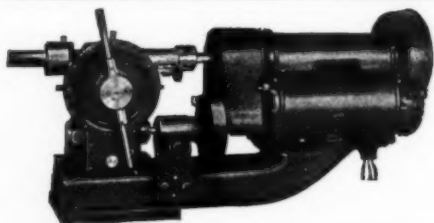
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The Cost of Finished Work is the  
Real Consideration.

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HOW GOOD——HOW FAST?

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## MEN

who expect Quality work expect to pay a  
Quality price, rather than to think *only*  
in terms of "how much."

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ARE YOU INTERESTED

*in* **GOOD DRILLING—  
GOOD TAPPING ?**

---

We have Tapping Attachments as well as Built-in Tappers  
and a full line of Motor Units and Drilling Machines.

**ALL ARE QUALITY TOOLS.**

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**THE AVEY DRILLING MACHINE CO.**  
CINCINNATI

# KRW Hydraulic and Sensitive ARBOR PRESSES

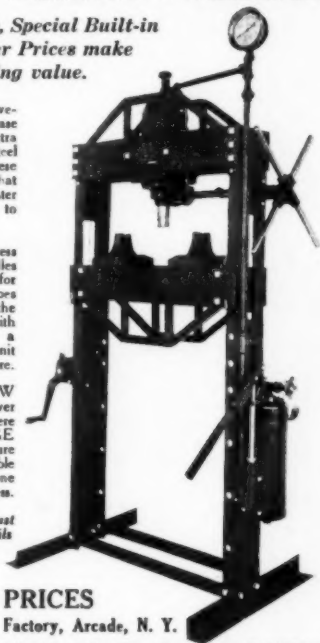
*New Improvements, Special Built-in Features and Lower Prices make them an outstanding value.*

THE last word in convenience, efficiency and ease of operation. Built extra strong and well braced with steel trusses electrically welded, these presses will withstand strains that would cause presses of lighter and inferior construction to buckle or collapse.

Hand wheel for sensitive press operations has sliding handles which pull out to the ends for increased leverage. Work does not have to be changed from the work table as is the case with other make presses having a separate sensitive press unit mounted on the side or elsewhere.

The importance of this KRW feature as a time and labor saver can be appreciated. Also there is **NO EXTRA CHARGE** for this important built-in feature on a KRW Press. Work table can be raised easily with one hand. A strictly one-man Press.

*Write for special circular, just off the press, giving full details and specifications of all KRW Arbor Presses.*



## PRICES

F. O. B. Factory, Arcade, N. Y.

- No. 37—35 ton Hydraulic and Sensitive Arbor Press (hand operated) \$128.00  
No. 37B—35 ton Hydraulic and Sensitive Arbor Press (air-oil operated) 128.00  
No. 37E—50 ton Hydraulic and Sensitive Arbor Press (hand operated) 150.00  
(Can also be furnished in air-oil operated at same price)  
No. 37F—70 ton Hydraulic and Sensitive Arbor Press (hand oper. only) 275.00  
Gauge and fittings, \$15.00 extra on all presses.

## K. R. WILSON

10-16 Lock Street, Buffalo, N. Y., U. S. A.

EXPORT DEPARTMENT  
126 Liberty St., New York

WEST COAST BRANCH  
722 Mateo St., Los Angeles



DEPENDABLE

**ELCO-SCREWS**

REDUCE ASSEMBLY COSTS



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Uniform High Quality

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Care and precision, backed by modern production methods is your guarantee that Elco screws will meet your most exacting requirements on both the quality and price basis. Their uniformity will result in speedier and better assembly.



MACHINE SCREWS  
MACHINE SCREW NUTS  
WOOD SCREWS  
LAG SCREWS  
CAP SCREWS  
PIPE PLUGS



*Write or Wire For  
Samples and Prices*



**ELCO TOOL & SCREW  
CORPORATION**



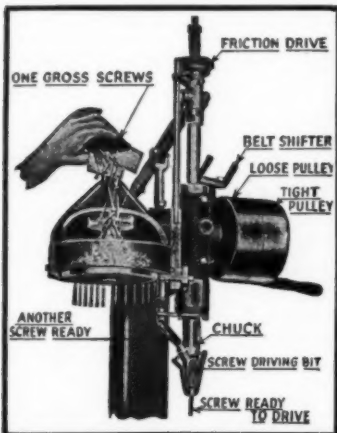
1808 Broadway, Rockford, Ill.

*"It Pays to Use Good Screws"*





# Better—More Uniform—Work



*Can be  
Secured with  
Decided  
Savings  
in Costs  
by using  
the  
Automatic  
MAGAZINE  
FED  
Reynolds  
Screw  
Driving  
Machine*

*Showing Magazine Feed of the Reynolds Automatic*

**H**UNDREDS of plants, the country over, are using the REYNOLDS as a means to reduce their costs of production. The automatic magazine feed aids in shaving off 60 to 85% in time and labor costs as compared with obsolete hand methods of driving screws. It also increases the value of the product because of the uniformity and quality which it guarantees. If you are not using this money saving machine it will pay you well to investigate.

*Write, giving dimensions over all of your work, length  
and gauge of screws used, and we'll send figures  
showing the savings you should  
effect with a REYNOLDS*

**The Reynolds Machine Company**  
Dept. H. H.                      Massillon, Ohio

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**"THE MODERN WAY TO DRIVE SCREWS"**

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## CONVENIENCE AND ECONOMY ALONG WITH PRESTIGE . . .



"I'm stopping at the Gibson." That means something in Cincinnati. And the central Fountain Square location of this famous hostelry means shorter distances by automobile or taxi . . . you'll save money! Just across the street from city bus terminal and Dixie Terminal, the gateway to Kentucky . . . closer to most street car lines than any other hotel.

1,000 rooms, each with bath;  
70% of all rooms at \$2.50, \$3,  
\$3.50 and \$4 . . . Garage.

C. C. Schiffeler - Managing Director



*The Greater*  
**HOTEL GIBSON**  
CINCINNATI

# Grind Fast—New Hand-ee Grinder

## Touch Off — Dress Up — Sharpen

Use it at the bench—or take it to the job. Works on A. C. or D. C. Just plug in and grind—10,000 r.p.m. on 110 v. A. C.

Gets into the hard-to-get-at places. Use wherever you have to touch off a part, pattern, mold, tool, or die, or to grind little holes, open or blind, straight or formed. Handy for sharpening tools or dies in place.

Fits the hand—4½" x 1½". Weighs 1 lb. Grinding wheels on shanks available in 100 shapes. Three shapes sent free. Mark the three you want on bottom cut.

Order direct or from your supplier. Money back if not satisfactory in five-days trial. Order today.

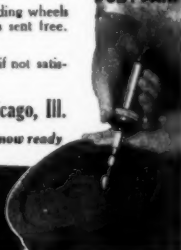
**M. C. TOOL CO., 116 S. Aberdeen St., Chicago, Ill.**

Ask for new catalog "Grinding Wheels on Shanks" now ready

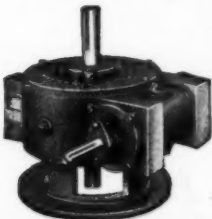
**FREE  
TRIAL  
SEND  
TODAY**

**\$10.00  
POST PAID**

**100 SHAPES AVAILABLE**



STANDARDIZATION PAYS



## SPEED REDUCERS

ALL TYPES  
FOR LIGHT AND  
HEAVY DUTY IN  
STOCK FOR

TYPE V (TIMKEN EQUIPPED)

**IMMEDIATE SHIPMENT**

SEND FOR CATALOG

BOSTON GEAR WORKS SALES CO.

NORTH QUINCY, MASS.

BOSTON NEW YORK PHILADELPHIA CLEVELAND CHICAGO

# BOSTON GEARS

# **WISE**

**For DRILL PRESS**

Often used on  
Miller, Shaper, Planer  
6', 9' and 12' Jaws

With Jig Attachments much  
duplicate drilling without special Jig cost.



**Fig. 2**  
Without Jig  
Attachments

## **KNURL HOLDER**

**For Turret Lathes**

Operates like Screw Die  
Adjustable to any size  
within its capacity.

**TWO SIZES — TWO STYLES**

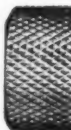
Straight Cut Knurls in  
Swivel Lugs Produce  
all Standard Knurling.

*Send for Circulars*



Swivel  
Lugs

Shank made  
to suit Turret



**THE GRAHAM MFG. CO., 78 Willard Ave.  
PROVIDENCE, R. I.**

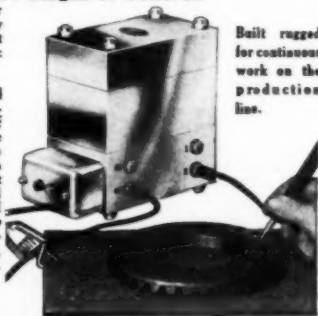
## **For Light and Heavy Etching**

**With 24 Stages of Control.**

The LUMA Master  
Etchtool fulfills every  
marking requirement that  
can be done by an electric  
Etching outfit.

A Production Tool  
with as many as 24 different  
stages or varieties of  
control for regulating the  
depth of marking, this  
tool can be used for extra  
light marking of machine  
scales, micrometers and  
fine tools or can be used  
for extra heavy and deep  
marking of rough and un-  
finished iron, cast iron,  
forgings, steel plates, etc.

*Send for circular giving  
complete data and details  
of this modern Instrument.*



Built rugged  
for continuous  
work on the  
production  
line.

**LUMA ELECTRIC EQUIPMENT CO.**  
**DEPT. H.—Main P. O. Box No. 132—TOLEDO, OHIO**

## **ORDER FROM THEM WITH CONFIDENCE**

A machine or tool that is advertised today is a machine or tool in which prospective purchasers may well place their confidence, for only reliable products can be profitably advertised during these times. It will pay you, therefore, to read and study the messages of the following manufacturers who are advertising in this issue:

Abart Gear & Machine Co.  
American Tool Works  
Anderson Bros. Mfg. Co.  
Armstrong-Blum Manufacturing Co.  
Armstrong Bros. Tool Co.  
Atlas Press Co.  
Avey Drilling Machine Co.  
E. A. Baumbach Mfg. Co.  
Boston Gear Works Sales Co.  
Burke Machine Tool Co.  
Cleveland Twist Drill Co.  
Defiance Machine Works  
Delta Manufacturing Co.  
Eisler Electric Corporation  
Elco Tool & Screw Corporation  
Ettco Tool Co.  
Excelsior Tool & Machine Co.  
Foote-Burt Company  
J. C. Glenzer Company  
Graham Manufacturing Co.  
Grant Mfg. & Machine Co.  
Illinois Testing Laboratories, Inc.  
T. H. Lewthwaite Machine Co.  
Luma Electric Equipment Co.  
M. C. Tool Company  
J. E. Martin Tool & Die Works  
Procunier Safety Chuck Co.  
Reynolds Machine Co.  
Schwerdtle Stamp Co.  
Siewek Tool Company  
N. A. Strand & Co.  
Sunstrand Machine Tool Co.  
Thompson Grinder Co.  
Walls Sales Corporation  
The Walton Co.  
Western Tool & Mfg. Co.  
Whitney Metal Tool Co.  
K. R. Wilson  
Witteck Manufacturing Co.

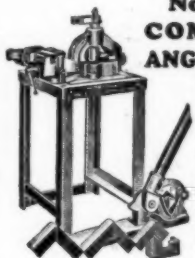
Get in touch with these progressive manufacturers when in need of  
**DEPENDABLE PRODUCTS.**

**No. 20  
BALL BEARING  
PUNCH**



Capacity,  $\frac{1}{2}$ " thru  $\frac{1}{2}$ " iron.  
Weight, 20 lbs.

**No. 455  
COMPLETE  
ANGLE-IRON  
UNIT**



Capacity  
 $2\frac{1}{2}$ " x  $2\frac{1}{4}$ "  
angle iron  
Weight, 225  
pounds.

**SPEED**

Notches, Cuts,  
and Bends  $2\frac{1}{2}$ " x  
 $2\frac{1}{4}$ " Angle  
Iron in One  
Minute Flat.

*Write for Catalog and Price List on Entire Line*

**WHITNEY METAL TOOL COMPANY**  
**95 FORBES ST.,** **ROCKFORD, ILL.**

**LOW-COST TAPPING!**

**The Procunier  
High-Speed Tapper**

Converts your drill press into a sensitive tapping machine at the cost of a few dollars.



**Over 2000 R. P. M.**

Our brand new friction tapper (Illustrated) is reversible, has a "double cone" cork clutch, and can be driven over 2000 R. P. M. on many jobs. We also manufacture positive drive tools for slower work.

**Take advantage of our free trial offer.**

*Send for circular giving complete information and prices.*

**PROCUNIER SAFETY CHUCK CO.**  
**14 S. Clinton St.,** **Chicago, Ill.**

# "ALNOR" Pyrometers

for the  
Hardening  
Furnace

## MODEL 223

Inexpensive, yet accurate and durable, the ALNOR Pyrometer is used by large and small shops everywhere for heat-treating work. Because of its low first cost and compact size it is also very popular for soft metal melting, galvanizing, die casting, japanning, enameling, measuring flue gas temperatures and many other purposes.



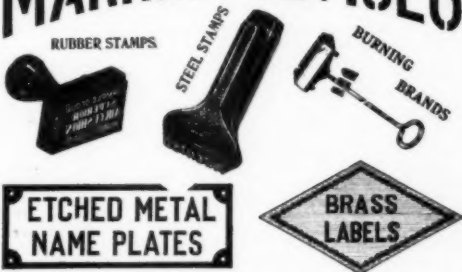
**\$35**

As  
Illustrated

*Write for descriptive folder*

**Illinois Testing Laboratories, Inc.**  
150 W. Austin Ave., Chicago, Ill.

## MARKING DEVICES



**THE SCHWERDTLE STAMP CO.**  
BRIDGEPORT, CONN.

# INDUSTRIAL REHABILITATION

By

W. A. ROBERTSON

*Chairman of the National Committee on  
Industrial Rehabilitation.*

*Chairman of the Board, Westinghouse  
Electric and Manufacturing Co.*

Capital expenditures by manufacturers and industry in general for the rehabilitation of their plants and the replacement of obsolete and worn-out equipment, at this time would be helpful in many ways. It would help unemployment. It would also cost less now.

Business is basically justified in spending money now for rehabilitation and modernization. Reserves in the Federal Reserve Banks, beyond what they are required by law to maintain, are above \$300,000,000. Potentially such reserves suggest the basis for expansion of bank deposits, or, on the other side of the balance sheet bank loans and investments, of approximately \$3,000,000,000. In the past, large excess bank reserves have produced credit expansion. In the coming months, as confidence returns, and as funds are required by business, it is natural to expect that the law of credit expansion under like circumstances will work and that these excess funds will be put to use. Additional excess reserve is seen in our increased gold supply from abroad. The overall effect will tend to raise prices and to stimulate business generally.

Historically there is a national relationship between the use of bank credit on the one hand and business activity and prices on the other. Therefore, it is fair to assume that, barring unforeseen events, we are coming into a period of business activity and advancing prices.

*The questions which men of affairs should ask themselves are:*

Have we arrived at the period when we should set our respective business houses in order in preparation for an early business revival? Or stated differently: Have we arrived at the period when the country has been sufficiently deflated to make a concerted effort to start business in the other direction not only advisable, but absolutely necessary? It seems clear to me that the answer to this question should be "Yes." The work can be done to greater advantage now than later because of the favorable prices of labor and material.



# MORE PRODUCTION

With Higher Speed, Less Spoiled Work, Fatigue or Broken Taps



## ETTCO

High Speed—Sensitive  
**TAPPING  
ATTACHMENT**

**MULTIPLE SPINDLE TAPPING HEADS**  
With complete engineering service.

**FIVE SIZES—UP TO ONE INCH TAPS**

*Try Ettcos at Our Expense. We have a nice New Circular ? ?*

**ETTCO TOOL CO., Inc.,** 594 Johnson Ave.,  
BROOKLYN, N. Y.

This cut shows our  
**Rapid Clamping  
Drill Jig**—tooled  
complete for drilling  
a large hole in a Ford  
steering knuckle.



*Send for our  
new catalog  
No. 3 showing  
the different  
set ups of our  
drill jigs.*

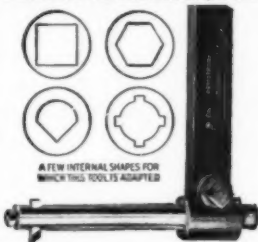
**SIEWEK TOOL COMPANY**  
2345 Walcott St., Ferndale, Michigan

# ARMSTRONG TOOL HOLDERS

Cut Costs on *Every* Operation on Lathes, Planers, Slotters and Shapers.

No matter what the job there is an ARMSTRONG Tool Holder that will do it, that will do that operation and many others and will save "All Forging, 70% Grinding and 90% High Speed Steel" on all. Keep up with the Armstrong System of Tool Holders—

## ARMSTRONG Extension Shaper Tool



A FEW INTERNAL SHAPES FOR WHICH THIS TOOLS ADAPTED

Write for Catalog B-27

An extremely rigid tool adapted to die work, internal keyways—wherever extra clearance is needed.

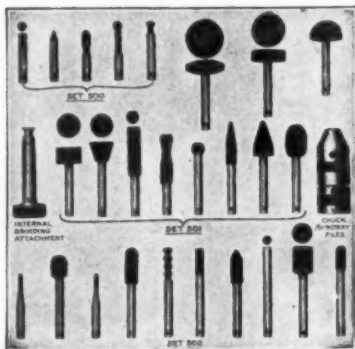


**ARMSTRONG BROS. TOOL CO.**

"The Tool Holder People"

308 N. Francisco Ave., CHICAGO, U. S. A.

## 1905 *Strand* 1932 ROTARY FILES



HIGH SPEED  
STEEL

HAND CUT

ROTARY FILES  
USED WITH  
STRAND  
FLEXIBLE  
SHAFT  
MACHINES  
ARE GIVING  
WONDERFUL  
RESULTS

**N. A. Strand & Co.**

5001-09

No. Lincoln Street  
CHICAGO

# VANDERBEEK UNIVERSAL JOINTS



Are used in all kinds of machines where high grade joints are needed. The very highest grade of workmanship goes into our joints.



MADE BY  
AMERICAN TOOL  
WORKS, HARTFORD, CONN.

## We specialize on Joints

for instrument work and light drive as well as airplane use. Hundreds of thousands of Vanderbeek Universal Joints are in daily use.

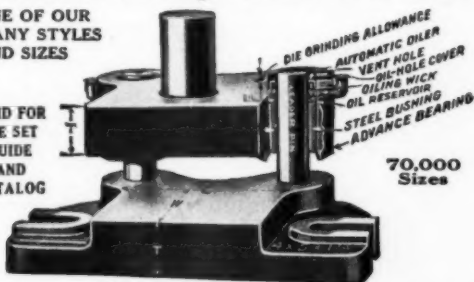
*Write for Prices and State Your Quantities*

**American Tool Works, Inc.**  
25 High St., Hartford, Conn., U. S. A.

## Automatically Oiled Die Sets

ONE OF OUR  
MANY STYLES  
AND SIZES

SEND FOR  
DIE SET  
GUIDE  
AND  
CATALOG



**E. A. BAUMBACH MFG. CO.**

GENERAL OFFICE AND WORKS

1810 South Kilbourn Ave., CHICAGO, ILLINOIS

*Sales and Engineering Offices—Principal Cities U. S. A. and Canada*

## Abolish Expensive Hand Finishing

*with a*



### Simplex-M Abrasive Band Grinder

This Grinder accelerates production and cuts costs. Hand emerying or filing operations are antiquated in comparison. The use of this new modern machine assures straight grain finishes with sharp edges. *Details of this and other styles and sizes on request.*

**WALLS SALES CORP.,** 96 Warren Street  
NEW YORK

## Let Your Losses Stop with the Broken Tap



Don't halt production and pay skilled mechanics to dig it out, often injuring the work.

### A Handy Walton Tap Extractor

Will forestall these unnecessary losses. Insert its flutes into the broken tap, twist the end—an apprentice can do it in a jiffy—and the tap backs out without injury to the threads.

Made in three and four flute styles.

*Let us send it to you for a sixty-day free trial*

## The Walton Company

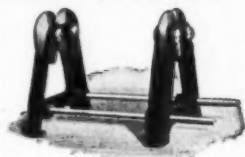
302 Pearl St.,

Hartford, Conn.

# Anderson Ever Ready Balancing Ways

**Exceedingly Sensitive**

**Easy to Manipulate**



Made in six sizes to balance anything that revolves from a crank shaft to a 24,000 lb. turbine rotor. They require no special leveling, no adjustment, and no centers.

Equipped with glass-hard spindles, chilled steel discs, and especially sensitive ball bearings, to give accurate, long time service.

"Swing"	20"	40"	60"	72"	96"	72"
Greatest distance bet. standards.....	20"	30"	30"	66"	88"	20'
Capacity in lbs. ....	1000	2000	2000	5000	10000	24000
Approx. shipping weight.....	45	90	150	350	650	
Code .....	Bend	Bid	Bis	Bib	Ben	

**Anderson Bros. Mfg. Co.**  
1915 Kishwaukee St., Rockford, Ill.

## The Utility Sleeve Detachable Taper Shank



*Use one* with all your straight shank tools, and you will discover a new field in tool economy.

*Simply insert* the shank of a drill or reamer into its sleeve, and the "Utility" works as positively and efficiently as a solid taper shank tool.

The substantial saving is obvious. It eliminates expensive chucks and when the tool is worn or broken you merely discard the straight shank tool, not the whole taper shank tool.

*Glenzer tools establish economy —  
send for circular*

**The J. C. Glenzer Co.**

6469 Epworth Boulevard

DETROIT,

MICHIGAN

# "Champion" Emery Wheel Dresser

## Outlasts a Dozen Cheaper Dressers

The "Champion" is made by experts, for long life and the best service. The only dresser that runs in an oil bearing.



The most economical dresser you can buy. Cutters are made of the best grade of tool steel, milled and heat-treated and tempered—fully guaranteed. Get the complete details on this cost saving tool.

*Write for Catalog also describing Champion Tool Holders, Expanding Mandrels, Vises, Clamps, Shop Furniture, Etc.*

**The Western Tool & Mfg. Co.**  
**SPRINGFIELD, OHIO**

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## This Publication

Over 26 years ago this publication began advertising the products of reliable manufacturers to the metal-working trade. It is mailed regularly each month to every worthwhile prospective buyer of machinery, equipment, supplies and services in the industry. In the 26 years it has been published, millions of dollars worth of merchandise has been purchased by its readers.

Those who receive this publication regularly read it and respond to its advertising messages. Thousands of plants use it as a buying guide. We believe we sell more products per dollar of advertising than you can obtain in any other way. It is precisely the one medium that can produce profitable results for its advertisers at a reasonable cost.

*Rates, circulation and other data on request*

**Hitchcock Publishing Co.**

**508 So. Dearborn St.,**

**Chicago, Ill.**

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## Actual Riveting Results



### Are Most Convincing

Send us samples of your most difficult work, in close corners or out-of-the-way places, let us rivet them on the—

### GRANT NOISELESS SPINNING RIVETER

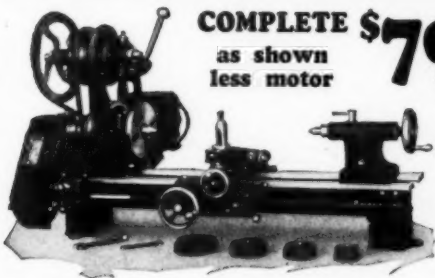
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**COMPLETE \$79<sup>00</sup>**  
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12"x36"  
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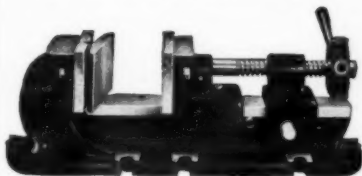
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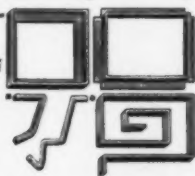
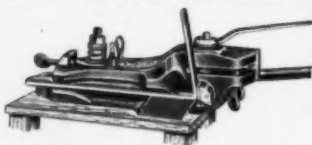
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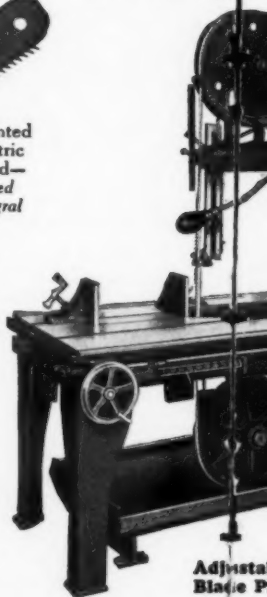
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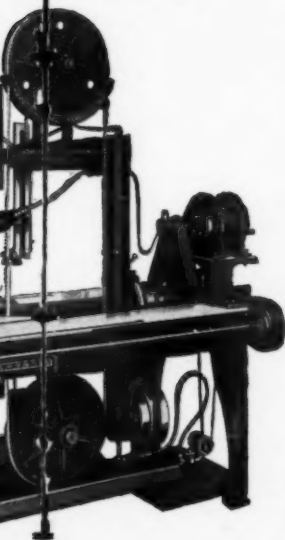
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## Chucks, Collet

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## Chucks, Drill and Tap

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Graham Manufacturing Co., Providence, R.I.

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Graham Manufacturing Co., Providence, R. I.

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### Hack Saw Machines

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### Pulleys-V

Delta Mfg. Co., Milwaukee, Wis.



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### Punch, Shear and Bender, Hand

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Armstrong-Blum Mfg. Co., 341 N. Francisco  
Ave., Chicago  
Lewthwaite Mche. Co., T. H., 311 E. 47th,  
New York  
Whitney Metal Tool Co., Rockford, Ill.

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Lewthwaite Mche. Co., T. H., 311 E. 47th, N. Y.

### Punches and Shears

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### Tapping Attachments

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St., Chicago, Ill.

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Procurator Safety Chuck Co., 14 So. Clinton  
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Whitney Metal Tool Co., Rockford, Ill.

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Av., Chicago

## Tools, Lathe and Planer

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## Tools, Machinists'

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Av., Chicago

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Blaser Mfg. Co., J., Springfield, Ill.  
Bernstein & Co., Geo. M., 221 N. Elizabeth  
St., Chicago, Ill.  
Brown Machinery Co., St. Louis, Mo.  
Brownell Machinery Co., Providence, R. I.  
Carroll & Son, Wm., Cincinnati, Ohio  
Cincinnati Mch. & Supply Co., Cincinnati, O.  
Clinton Machinery Co., 23 So. Clinton St.,  
Chicago, Ill.  
Donahue Steel Products Co., 74th and  
Ashland Ave., Chicago  
Eastern Machinery Co., Cincinnati, O.  
Elyria Belting & Mch. Co., Elyria, Ohio  
Eosley Machinery Co., E. L., 735 Ees St.,  
Chicago, Ill.  
Factory & Mill Supply Co., 170 Oliver St.,  
Boston, Mass.  
Fay & Egan Co., J. A., Cincinnati, Ohio  
Gosse, James, J., Boston, Mass.  
Hyman & Sons, Joseph, Philadelphia, Pa.  
Indianapolis Machinery & Supply Co.,  
Indianapolis, Ind.  
Interstate Mch. Co., 130 S. Clinton, Chgo.  
Iroquois Machinery Co., Buffalo, N. Y.

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Johnstone Machinery Exchange, Toledo, O.  
Jones Machine Tool Co., Cincinnati, Ohio  
McDonald Machinery Co., St. Louis  
Marr-Galbreath Mch. Co., Pittsburgh, Pa.  
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Chicago, Ill.  
Mid-West Machine Tool & Supply Company,  
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Simmons Machine Tool Corp., Albany, N. Y.  
Strong, Carlisle & Hammond Co., Cleveland,  
Ohio  
Temps Bros. Motor Co., Brooklyn, N. Y.  
United Machinery & Supply Co., St. Louis,  
Mo.  
Wertman Mch. Co., M. A., Cleveland, O.  
West Penn Machinery Co., Pittsburgh, Pa.  
White Machy. Co., A. D., 108 N. Jefferson  
St., Chicago  
Wigginsworth Mch. Co., Cambridge, Mass.

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Av., Chicago  
Armstrong Bros. Tool Co., 308 N. Francisco  
Av., Chicago  
Graham Manufacturing Co., Providence, R. I.  
Martin Tool & Die Works, J. E., Springfield, O.

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Graham Manufacturing Co., Providence, R. I.

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Graham Manufacturing Co., Providence, R. I.

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Boring mill, Bullard 36", m. d.	Planer, Coulter automatic.
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Lathe, 14"x8' Hendey, s. p. d.	Shear, 3/16" Quickwork, m. d.
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 Miller, No. 3 Cincinnati vertical.  
 Shaper, 16" Sellow tool room.

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Drill, 24" Superior, b. g. & p. f.	Planer, American 24x24x6.
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Grinder, surface No. 2 B. & S. with magnetic chuck, generator.....	310.
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Milling machine, No. 2 $\frac{1}{2}$ Rockford, univ., dividing head, vise, arbors.....	650.
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Radial drill, 30" Fostick, single pulley drive.....	350.
Shaper, 7" Rhodes, complete with vise.....	125.
Shaper, 14" G. & E., double back geared, vise.....	190.
Shear, power square, 50" Excelsior, 10 ga., 15" gap, like new.....	300.
Welder, spot, brand new, 5 k. w. #95.; 10 k. w.....	150.
Planers, Lathes, Screw Machines, Air Compressors, Woodworking Machines.	

### FOR SALE BY

**McDonald Machinery Co., 1535 N. Broadway, St. Louis, Mo.**

Bolt mchs., Landis & Acme 1 $\frac{1}{2}$ ".	No. 3; Ohio No. 29 all universal;
Boring mill, Lucas & Hulhor. & vert.	No. 3, Kemp. No. 1, LeBlond
Brake, D. & K. 6' 10 gauge, power.	No. 3-H.; B. & S. No. 3-B, s. p. d.,
Drills, Moine, 33-sp. hole hog.	all plain, Cincinnati 18" automatic,
Drills, Cin-Bickford 3' & 3 $\frac{1}{2}$ ' radials.	Cleveland No. 2 s. p. d., B. & S.
Gear hobber, G. & E. 24".	Pipe mches., Curtis, B. & K. 12" m. d.
Grinders, B. & S. No. 2 surf. & univ.	Punch presses, Bliss No. 20; Swaine
Grinders, P. & W. 14" vert. surf. b.b.	Nos. 33 & 35; Federal Nos. 2, 3, &
Keyseaters, M. & M. No. 2.	4, all o. b. i., Swaine No. 51 & 53.
Lathes, Hendey 14"x6"; Lehman	Screw machines, Woods No. 2 tilt-
18"x9", Amer. 22"x10' q. c. g. grd.	ing turret, Milholland No. 4 and
hd.; 50 others in all sizes & styles.	Foster No. 7 b. g. hand.
Milling machines, Becker No. 3,	Shapers, G. & E. S. & M., Cin., Ohio
B. & S. No. 5, vert.; Knight No. 2,	16" b. g., Cin. 20", G. & E., Steptoe,
vert. miller and driller.	Cin., S. & M., 24" b. g.; Ohio,
Milling machines, Van Norman	S. & M. 26" b. g., Rhodes 7".
No. 2 duplex; B. & S. No. 1 $\frac{1}{2}$ Cinc.	Square shears, Niag. 62" 18 ga., pwr.
No. 1 $\frac{1}{2}$ , Hendey No. 1-B, Kemp.	Turret lathes, W. & S. No. 2A univ.

### FOR SALE BY

**Miles Machinery Co., - Saginaw, W. S., Mich.**

DRILLS RADIAL	
3' Morris.	4' American.
3' American.	4' Western.
3' Cincinnati-Bickford.	5' Western.
3' Western.	6' N. B. P. universal.
4' Mueller.	6' & 8' Western.
LATHES	
12"x6" Hendey.	16"x 8" Lodge & Shipley.
14"x6" LeBlond.	18"x 8" Whitcomb Blaisdell, grd. hd.
15"x10" Carroll-Jamieson.	19"x10" Sidney.
16"x6" Monarch.	20"x 8" Lodge & Shipley.
16"x7" South Bend.	26"x13" Wicks.
SHAPERS	
7" Rhodes.	20" Gould & Eberhardt.
14" Steptoe.	20" Ohio.
16" Kelly.	24" Potter & Johnston.
16" Smith & Mills.	24" Gould & Eberhardt.
18" Sterling.	25" Columbia.
20" Milwaukee.	36" Morton draw cut.

# USED AND REBUILT MACHINERY

## FOR SALE BY

West Penn Machinery Company

1208 House Building,

Pittsburgh, Pa.

Automatic, No. 0 Brown & S. b. d.  
Auto, "G" Gridley, 7' & 14", m. d.  
Air compressors, 30 to 2500 cu. ft.  
Bender, pipe, No. 6-C Wallace, m. d.  
Blower, Spencer turbine, 1800 c. f.  
Bolt cutter, 1" Landis, 3 hds., m. d.  
Bolt cutter, 14" Landis, dbl. head.  
Bolt cutter, 24" Acme, sgl. hd. m. d.  
Bor. mill, 48" Bullard Maxi. 2 hds.  
Boring mill, 72" Pond, 2 hds., b. d.  
Boring mill, 96" Pond, 2 hds. m. d.  
Boring mill, 16'-24" Niles, 2 hds. b.d.  
Boring mill, floor type, 4" Bement.  
Brake, 5' press type, 10 gauge.  
Brake, 6' D. & K. 10 ga. box & pan.  
Brake, 8' D. & K. 10 ga. box & pan.  
Brake, 10' Dreis & K. 4", m. d.  
Bulldozers, Nos. 2, 4, 6, 28, 29 & 30.  
Cranes, Electric Traveling.  
Die threader, Smalley General, dies.  
Dieing mchcs., 25 & 50 ton H. & W.  
Die sinker, No. E-3 Keller, m. d.  
Drill, bench, 12" Buffalo, a. c., m. d.  
Drill, b.s. 14" Canedy-O. 1750 r.p.m.  
Drill, 21" Rockford, tap. att. m. d.  
Drill, radial, 24" Fosdick, t. a., b. d.  
Drill, radial, 34" Cin.-Bickford, s.p.d.  
Drill, radial, 4" Prentice, t. a., b. d.  
Drill, radial, 6" Dreses, s. p. d.  
Flanger, McCabe, 4" capacity, dies.  
Gear cutters, 11", 24" & 36" Gleason.  
Gear cutter, spur, 36" x 10" Newark.  
Gear hobber, No. 4 Sch. & Sch. 118".  
Gear planer, 20-ft. Gleason, m. d.  
Grinder, centerless, No. 2 Cincinnati.  
Grinder, centerless, No. 4-C Detroit.  
Grinder, internal, No. 70 Heald.  
Grinder, rad., 14" M. & D., m. d.  
Grinder, surface, No. 16 Blanchard.  
Grinder, surface, 14" Arter.  
Grinder, surface, No. 2 Reid, b. d.  
Grinder, tool & cut., No. 2 Walker.  
Hammer, Blacker, power, 35-lbs.  
Hammer, 80-lb. Bradley, cush. helve.  
Hammer, 200-lb. Bradley, cush. helve.  
Hammer, 200-lb. Bradley, compact.  
Hammers, Nos. 3-B, 4-B, 4-N Nazel.  
Hammers, steam, 600 lb. to 6000 lbs.  
Header, No. 2 Wat. Far. o. d., tr. st.  
Jacks, 35-ton Barrett, ball bearing.  
Keyseater, No. 6 & 3 Baker.  
Lathe, 13" x 6" South Bend, q. c. g.  
Lathe, 16" x 6" LeBlond, q. c. g., d.b.g.  
Lathe, 20" x 8" Hendey, tie bar, t. a.  
Lathe, 24" x 16" Bridgeford, g. hd. m. d.  
Lathe, 48" x 26" Bridgeford, g. hd. m. d.  
Lathe, turret, No. 6 Warner & S.  
Lathe, turret, 18" Libby, m. d.  
Lathe, turret, 24" Steinle, 64" hole.  
Lathe, tur., 36" Gisholt, 9" hole, m. d.  
Lysholm tables, 72" x 30".  
Miller, plain, No. 2-A Milwaukee.  
Miller, thread, No. 5 Lees Bradner.

Miller, universal, No. 3 LeBlond.  
Miller, vertical, No. 2 Cincinnati.  
Nut tapper, 6-spindle Acme, 2".  
Pipe machine, 2" Landis.  
Pipe mchcs., 8" Oster, 8" Williams.  
Planer, 30" x 30" x 10' Woodward & P.  
Planer, 48" x 48" x 18" Cinti, belt drive.  
Planer, o. s., 36" x 36" x 16" D. & H.  
Planer, o. s., 48" x 48" x 16" D. & H. m. d.  
Planer, rotary, 48" Niles, m. d.  
Presses, arbor, No. 17 Greenerd.  
Press, o. b. i. Ferracute C1, 3" stroke.  
Press, o. b. i., No. 5 Rockford; 6500 lb.  
Press, hydraulic, 1,000 ton United.  
Press, hyd. 100-ton Watson-Stillman.  
Press, s. s., 13" x 19", 2" stroke.  
Press, No. 784 Bliss, t. r. 10" str.  
Press, No. 92 B Toledo, d. c. 24" str.  
Press, No. 96-A Toledo, d. c. 5" str.  
Press, screw, No. 87 Niagara.  
Press, wheel, 150-ton Schaffer.  
Punch, beam, No. 5 Hiles & Jones.  
Punch, hor., Cleveland, 1" thru 1".  
Punch, hand, Shatz, bar and angle.  
Punch & sh. No. 6 L. & A. 4" thru 4".  
Punch, multiple, No. 5 H. & J. 10".  
Riveters, air, hammer, spinning.  
Rolls, bending 7" x 3" Cleveland.  
Rolls, bend., 8" x 3" Bertsch, d. e. b. d.  
Rolls, bending, 12" x 4" H. & J. d. e.  
Roller, thread, Nos. 40 & 50 W. - F.  
Sand blast, Pangborn, 90", ER-1.  
Saw, band, metal No. 2 Klem, m. d.  
Saw, cold, 48" Newton, m. d.  
Saw, friction, Nos. 2 & 3 Ryerson.  
Saw, hack, No. 5 Marvel, b. d.  
Saw, hack, 12" Peerless, m. d.  
Shapers, 16", 20", 24" & 36" G. & E.  
Shear, angle, 6" x 6" x 1" H. & J.  
Shears, alligator, 14", 2", 3" & 4".  
Shear, bevel, Lennox 4".  
Shear, circle, No. 208-A Niagara.  
Shear, No. 1 Gray, 3/16", 34" gap.  
Shear, gang splitter, No. 235-A Bliss.  
Shear, Cleveland "W" s capacity.  
Shear, guil. No. 5 H. & J. 4" sq., m. d.  
Shear, rotary, 4" Ryerson.  
Shear, 36" x 16 ga. Pexto, foot.  
Shear, squaring 8" x 14 ga. Ohl.  
Shear, sq., 10" x 10 ga. Kutscheid, m. d.  
Shear, 54" x 4" Garrison, 24" gap.  
Shear, 12" x 4" Wheeling, 31" gap.  
Slotter, 15" Dill, motor drive.  
Straightener, 60" Nat. 14 ga. 17 rolls.  
Straight'r, 48" United, 16 ga. 13 rolls.  
Straightner, 14" round Abramson.  
Straightener, 4" round Abramson.  
Swaging mche., No. 5-A Standard.  
Testing mche., Brinnell hardness.  
Testing mchcs., 50,000 & 100,000-lb.  
Tumbling barrel, 18" x 36", b. d.  
Upsetters, 1" to 6".  
Welders, spot and butt.

## USED AND REBUILT MACHINERY

### FOR SALE BY

**Joseph Hyman & Sons - 2600 E. Tioga St., Philadelphia, Pa.**

Stamping Press Specialists. 1200 Presses In Stock.

No. 703 Bliss flat edge trimmer.  
 No. 23-D Bliss, gap frame, double crank, flywheel, weight 13,000 lbs.  
 No. 307 Bliss, single crank, double geared, weight 28,500 lbs.  
 No. 6-F Bliss, dbl. crank, geared, tie rod, 84" bet. uprights, weight 36,000 lbs.  
 No. 64 Bliss, double crank, geared, 54" between uprights, weight 28,000 lbs.  
 No. 14 Toledo, side flywheel horning, weight 6,000 lbs.  
 No. 202-C Toledo, gap frame double crank, geared, weight 7,500 lbs.  
 No. 94-F Toledo, dbl. crank, grd., 72" between uprights, weight 36,000 lbs.  
 Shear, No. 196 Stoll, 8' 16 gauge capacity, underdriven, grd., weight 5200 lbs.

### FOR SALE BY

**Scott-Bansbach Machinery Co., 4607 West 20th St., Chicago, Ill.**

Automatic screw machines, B. & S., No. 00, 0 and 2G.....\$250. to \$400.  
 Automatic screw machine, Gridley 4 spindle "F" 1 1/2", 1 1/2" & 1 1/2" 300. to 400.  
 Automatic screw machine, 3 1/2" Cleveland Model A, No. 27182..... 300.  
 Drill, 24" Sibley sliding head, b. g. and p. f..... 200.  
 Drill, 2-spindle H. W., h. s., b. b. heavy duty, class B..... 200.  
 Gear hobber, S. & S. No. 0, capacity 12"x10"x6 1/4 d. p..... 250.  
 Gear cutter, B. & S. No. 3, 26" for spur gears..... 200.  
 Grinder, No. 2 Brown & Sharpe automatic surface, magnetic chuck..... 350.  
 Grinder, Capitol internal, capacity 3/16" to 2" x2"..... 100.  
 Lathe, 18"x6" Hendey quick change, taper attachment, serial No. 19189 450.  
 Lathe, 20"x8" Monarch, d. b. g., q. c. chucks..... 300.  
 Lathe, 30"x13" H. S. & G. heavy duty, q. c., d. b. g. 16,000 lbs..... 1,000.  
 Miller, No. 3 Kempsmith, cone drive, with c/s and vise..... 500.  
 Miller, No. 1 Garvin universal, fully equipped..... 350.  
 Miller, Cleveland universal, No. 1 g. h., fully equipped..... 600.  
 Miller, No. 2 MU. Garvin universal, fully equipped..... 450.  
 Miller, 12" Cincinnati, mfg. type, s. p. d., vise and pump..... 250.  
 Miller, Briggs, G. & E. manufacturing, 16"..... 75.  
 Miller, No. 5 Becker vertical, no rotary..... 300.  
 Miller, No. 7 Becker, Lincoln type..... 75.

### FOR SALE BY

**Wm. C. Johnson & Sons Machinery Co.,**

**1211-1223 Hadley Street,**

**St. Louis, Mo.**

Bar shear, 5"x4".  
 Boring mill, 36" Gisholt.  
 Drill, 14" Mason high speed.  
 Drill, 20" Champion.  
 Drill, 22" Barnes, back geared.  
 Drill, 24" Prentice, sliding head.  
 Drill, 25" Barnes back geared.  
 Drill, 28" Barnes sliding head.  
 Drill, 1-spindle Avey.  
 Drill, 2-spindle Leland-Gifford.  
 Drill, 2-spindle Avey.  
 Grinder, Wells Bros. universal.  
 Grinder, 12"x60" Landis universal.  
 Hammer, 60 lb. Bradley helve.  
 Hammer, 600 lb steam.  
 Lathe, 18"x 8" South Bend.  
 Lathe 20"x10 Bradford.  
 Lathe, 24"x12' Lodge & Shipley.  
 Lathe, 24"x12' Schumacher & Boye.  
 Lathe, 30"x15' Lodge & S., q. c. g.  
 Lathe, 36"x15' American, q. c. g.  
 Miller, No. 1 U. S. hand.  
 Miller, No. 2 LeBlond universal.  
 Miller, No. 2 Ohio single pulley dr.  
 Miller, No. 3 Kempsmith universal.  
 Miller, No. 5-B Brown & Sharpe.  
 Pipe machine, 8" Williams.  
 Planer, 42"x42"x26' Wheeler, 2 hds.  
 Press, No. 57 Swaine straight back.  
 Press, No. 14 Bliss toggle.  
 Press, No. 3 Toledo.  
 Press, Stiles & Parker drawing.  
 Press, No. 37 Niagara str. back.  
 Press, No. 24 Toledo cam drawing.  
 Press, No. 723 Toledo cam drawing.  
 Punch, No. 14 W. W., 12" throat.  
 Punch, double end, two 20" throats,  
 capacity 1" in 1".  
 Screw machine, No. 3A Warner & S.  
 Shaper, 16" Smith & Mills.  
 Shaper, 32" Cincinnati.  
 Shaper, 24" American-Klopp.  
 Squaring shear, 8' power.  
 Tapper, auto., Rickert & Schafer.

# USED AND REBUILT MACHINERY

## FOR SALE BY

**Marr-Galbreath Machinery Co.,**

**58 Water St., Pittsburgh, Pa.**

Air compressor, 10x10" Chgo., n.s.b.  
 Air comp., 1050 cu. ft. Syn. m. d.  
 Air receiver, 48"x10" for 150 lb.  
 Air receivers, 4"x18", 150 lb., (14).  
 Angle roll, No. 3 Niagara, 1 1/2x3/16".  
 Auto. lathes, 14" Fay, belt and m. d.  
 Beading machine, No. 100 Niagara.  
 Bender, hand, 3 1/2"x1" Wallace.  
 Bender & straight'r, cap. 12" beams.  
 Bolt cutter, 1/2" Geometric, m. d.  
 Boring mill, 30" King; and Bullard.  
 Boring mill, 34" Colburn.  
 Boring mill, 36" Gisholt, turret hd.  
 Boring mill, horizontal 3" bar, b. m.  
 Brake, 8"x10 ga. Chicago, pan. m. d.  
 Brake, 52"x18 ga., P. S. & W., hand.  
 Brake, 6" D. & K., 16 ga. hand.  
 Brake 10' Keene toggle, 16 gauge.  
 Brakes, hd, 10', for 18 ga. Robinson.  
 Broaching mch. Nos. 1 & 3 La Pointe  
 Chuck, Walker magnetic, 6" diam.  
 Cold header, 1/2" W-F., solid die.  
 Crimping roll, 6 1/2" Robinson, 16 ga.  
 Die slotter, Garvin, rotary table.  
 Drill, elect. 1/2" U. S., 110 v. Univ.  
 Drills, multiple 10 and 20 spindle.  
 Drill, 20" Barnes, camel back.  
 Drill, 24" Rockford, g. f. taper att.  
 Drift, 25" Snyder, s. h., b. g.  
 Drill, radial, 5' Western, g. b., m. d.  
 Drill, radial, 3' Dreses.  
 Drill, sensitive radial, 3' Amer. t.a.  
 Exhauster, with 1 1/2 h. p. motor, 1/60.  
 Forging mchs., 1 1/2", 3" & 3 1/2" (steel).  
 Gear hobbess, No. 1 Adams "Farw."  
 Gear and pinion cutter, No. 3 Sloan.  
 Grinder, No. 14 Landis universal.  
 Grinder, universal tool & cutter.  
 Grinder, surface, G. & L., m. d.  
 Grinder, No. 1 LaSalle surface.  
 Grinder, 18" D. Rowbottom, o. h. b. b.  
 Hack saw, 6x6" Marvel, motor drive.  
 Hack saw, 8x8" Racine, belt.  
 Hack saw, 9x9" Peerless, m. d.  
 Hack saw, Peerless, 6" univ. shaping  
 Hammer, 50 lb. Kane & Roach, pwr.  
 Ham., 400 lb. No. 10 Beaud, pwr. b. d.  
 Hammer, 800 lb. Erie str. forg., s. f.  
 Hammer, 1000 lb Chbg., steam drop.  
 Hoists, chain, 1 to 8-tons capacity.  
 Joinder, (wood) 6" Wallace, motor.  
 Keyseaters, No. 2 Baker.  
 Lathe, Sundstrand 7" Mfg. type.  
 Lathes, 14"x6" Champion, q. c. g., tur.  
 Lathe, 14"x6" Hendey, m. d., t. a.  
 Lathe, 14"x6" Prentice, t. a., chuck.  
 Lathe, 14"x8" W.-B., q. c. g.  
 Lathe, 18"x8" L. & S. sel. hd. s. p. d. t. a.  
 Lathe, 19"x10" LeBlond, q. c. g., t. a.  
 Lathe, 20"x12" Monarch, q. c. g.; t. a.  
 Lathe, 22"x10" 10" Greaves-K., q. c. g.  
 Lathe, 24"x8" Hendey, t. a. (99% new)  
 Lathe, 24"x12" Pgh., q. c. g., chuck.

Lathe, 26"x15" G-K. for motor.  
 Lathe, 27"x16" Pgh., t. a., chuck.  
 Lathe, 30x15" Lehman, gd. hd.  
 Lathe, 32"x16" Pgh., q. c. g., chuck.  
 Lathe, 48"x26" geared head, m. d.  
 Miller, No. 28 Ohio pl. auto. feeds.  
 Miller, 2-GS. Hendey, g. b., s. p. d.  
 Millers, vert., Becker, 3, 4B, 5B.  
 Millers, pl. No. 3 B & S, LeBlond.  
 Miller, universal No. 4 B. & S.  
 Miller, auto. No. 2 M P & J., s. p. d.  
 Pipe benders, 2" Chgo & Wallace.  
 Pipe mche., 10" EC & B., 6" Oster.  
 Planer, 30"x10" W. & P., 2-heads.  
 Press, 42-h. p. Toledo, horn, plain.  
 Press, No. 6 Toledo, o. b. i., pl. m. d.  
 Press, No. 14 Toledo horn.  
 Press, s. s., s. c., b. g., 3 1/2" st., 7000 lbs.  
 Press, s. s., d. c., b. g., 3" st., 11000 lbs.  
 Presses, Nos. 3 & 4 Bliss, punch type.  
 Press, No. 19, Bliss o. b. i.  
 Press, o. b. i. No. 3 Niagara, 1 1/2" str.  
 Presses, foot, No. 87 Bliss, pendulum.  
 Press, No. 6 Perkins, s. s., 4000 lbs  
 Presses, No. 87 Niagara, screw.  
 Punches, s. e. 36", 48", 60", 72" thts.  
 Punch, s. e., Badger, 7" thrt., 1/2"x1/2".  
 Punch, Rapid, 20" thrt., 1"x1/2", m. d.  
 Punch & shear, d. e., 9-A., Beloit.  
 Punch & shear, d. e. 16" thts; 1 1/2"x1"  
 with angle & bar shear blades, m. d.  
 Punch & stake riveter, No. 123-C.  
 Toledo boiler makers.  
 Reduction gear, 20 h. p., 9:1.  
 Riveters, 3 A, 5 1/2" B, high speed.  
 Rolls, bend'g, 10"x5/16" Bertsch, d. e.  
 Rolls, bending, 8"x1/2" Bertsch, m. d.  
 Rolls, bend'g, 5"x5/16" Bertsch, d. e.  
 Rolls, 30"x1 1/2", 3 1/2"x3"  
 Screw machine, No. 0G B. & S.  
 Shaper, 7" Rhodes, vert. ram. m. d.  
 Shaper, 20" G. & E., b. g., vise.  
 Shaper, 24" G. & E., gear box, s. p. d.  
 Shaper, 24" P. & J down feed & m. d.  
 Shaper, 25" S & M., b. g., crk., A-1.  
 Shear, 42"x1 1/2" Niagara, 18" gap.  
 Shear, 72"x3/16"x20" gap, Stoll.  
 Shears, 1/2" & 1/4" Lennox, throatless.  
 Shears, alligator, 14", 2", 2 1/2" & 3".  
 Shear, alligator, No. 2 Badger, 2".  
 Shear, rotary, 12" thrt., cap. 10 ga.  
 Shear, rotary, No. 208 Niagara,  
 circle attachment.  
 Shear, rotary, 16 ga., Yoder, 24" thrt.  
 Shear, squaring, 8"x14 ga. power.  
 Shear, 10"x16 ga. Ohl power.  
 Slotter, 15" Dill, for motor drive.  
 Stencil cutter, Bradley.  
 Tappers, No. 2 Garvin, vertical.  
 Tube cutter, Fox 24" cap.  
 Turret lathe, 28" Gisholt, 9 1/2" h. s.  
 Turret lathe, 26"x7 1/2" h. s., Libby  
 Wheel press, 60-ton W. S., 34"x8 1/2"

## USED AND REBUILT MACHINERY

### FOR SALE BY

**James J. Gouse** - - **137 Oliver Street, Boston, Mass.**

Lathe, (gap) 14"-24"-12' bed, q. c. g., fine condition, price.....\$ 250.

Lathe, shafting L. & S., g. h., latest type, 16' centers, 20" swing, price 1100.

Press, Lucas forcing, 30 ton, price.....125.

300 tools in stock. Inquiries solicited.

### FOR SALE BY

**L. F. Seyfert's Sons, Inc., (Monarch Machinery Co. Div.)**  
**437-39 North Third Street, - - Philadelphia, Pa.**

Arbor presses, Nos. 3, 3½, 4 & 8 Greenerd; No. 3 Barnes screw press.

Drill presses, ball bearing Allen, Sipp & Edlund; 1 to 6 spdls, some mtr. dr.

Lathes, 12"x6" Hendey, tie bar head, pan and taper attachment.

Milling machines, Cincinnati No. 2 plain, No. 2M plain, motor drive, No. 2

Kempsmith universal cone.

Shapers, 16"x20" Ohio, 20" Gould & Eberhardt, 24" Steptoe.

### FOR SALE BY

**Wm. Carroll & Son, 1776 Lexington Ave. (Norwood) Cincinnati, O.**

Manufacturers of Dividing Heads.

Surplus Machine Tools in fine condition:

Lathe, LeBlond, 16"x6" draw-in and taper attachment, q. c. g. cone type.

Miller, B. & S. No. 2 plain, cone type, dividing head, vise and arbor.

Shaper, Gould-Eberhardt, 16" high duty, cone type.

No. 14 B. & S. Triple Index Centers, also several used dividing heads.

### FOR SALE BY

**The Elyria Belting & Machinery Co.,**

**Corner Williams and Buckeye Streets, - - Elyria, Ohio**

Baler, Logeman hydraulic, Type 13-P, operated by 21-A triplex horizontal double pressure pump.

Consolidated forging presses, Nos. 55, 56, (2) 56½, 57; all geared; motor drive; with side shear.

Crane, 3-ton P & H, electric, 32' span.

Lathe, 36" American Tool Works, countershaft.

Lathes, 9"x5' Star bench, 95% new, (only few left).

### FOR SALE BY

**Interstate Machinery Co., - - 130-2 So. Clinton St., Chicago, Ill.**

Bend'g rolls, 14' ½, 6' 5/16, 8' 16 ga.

Brakes, all sizes—hand or power.

Comb punch & shear, No. 55 Beloit.

Grinder, No. 24 Gardner, 23", vert

spindle, horizontal disc.

Grinder, disc, 20", Besly swingtab.

Lathe, new, 11"x3', q. c. g., m. d.,

Miller, No. 1 Knight vertical.

Miller, No. 2 Cleveland univ., vert.

head, dividing head, compl., s.p.d.

Nibbler, No. 00 Gray, 30" thr., m. d.

Press, No. 25½ Bliss, cons. horn. grd.

Saw, No. 8 Marvel band, mtr. dr.

Shears, 42" 14 ga.; 42" 18 ga.; 62" 18.

Throatless shears, 18 ga. to ½", rot.

Welder, arc, 200 amp., Lincoln port.

Middle-west's Most Complete Stock of Sheet Metal Machinery.

Please say "Blue Book" when writing to advertisers.



## USED AND REBUILT MACHINERY

### FOR SALE BY

**Factory and Mill Supply Co.,**

**170 Oliver St., Boston, Mass.**

Drill, 3' Morris radial, single pulley drive.	Shaper, 16" Gould & Eberhardt, motor drive.
Grinder, No. 2 Brown & S. surface.	Shaper, 20" Cincinnati, motor drive.
Milling machine, 28"x24"x12' Ingersoll, planer type, 4 heads, motor drive.	
Milling machine, No. 2 Cincinnati universal medium, cone drive.	

### FOR SALE BY

**Geo. M. Bernstein & Co.,**

**225 No. Elizabeth St., Chicago, Ill.**

Drill, Rock. b. b., m. d., 15" ...\$87.50	Screw mch., No. 2G-B & S. auto \$375.
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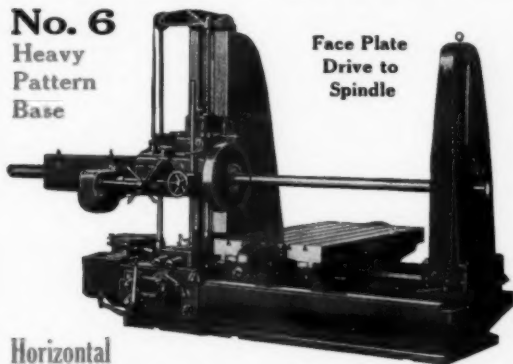
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